

DRAFT EVALUATION REPORT
Highland Technology, Inc.
650 Potrero Avenue
San Francisco, CA 94110
Application #29563 - Plant #24264

I. BACKGROUND

Highland Technology, Inc. has applied for an Authority to Construct and Permit to Operate the following equipment:

S-1 Vapor Degreaser; Make: Baron Blakeslee, Model: MLR-120LE-SPL

Highland Technology, Inc. is an electronics design and manufacturing company specializing in high quality precision electronic instrumentation and control equipment.

Highland Technology, Inc. has requested to decommission a permitted Vapor Degreaser at 18 Otis Street, San Francisco, CA 94103 (Plant #17883), and install the same Vapor Degreaser (S-1) and use the same chemical solvent at this new location (Plant #24264). The facility is proposing to use up to 100 gallons per year of TechSpray Precision-V ME1500 vapor-degreaser precision solvent.

II. EMISSION CALCULATIONS

Table 1. Annual and Daily Emissions from S-1

Solvent	Max Annual Throughput (gal/yr)	Density (lb/gal)	POC Content (lb/gal)	Annual Emissions (lb/yr)	Annual Emissions (tons/yr)	Average Daily Emissions (lb/day)	Average Hourly Emissions (lb/hr)
Precision-V ME1500	100	10.6	7.3	730	0.365	2.8	0.3

Basis: - Operating Schedule: 9.5 hours/day; 5 days/week; 52 weeks/year.
- Organic solvents are assumed to be 100% volatile and emitted into the atmosphere.

III. CUMULATIVE INCREASE

Table 2 summarizes the cumulative increase in pollutant emissions that will result from this application.

Table 2. Plant Cumulative Emissions Increase, Post 4/5/91

Pollutant	Existing Emissions Post 4/5/91 (tons/yr)	Application Emissions (tons/yr)	Cumulative Emissions (tons/yr)
POC	0.000	0.365	0.365

IV. TOXIC SCREENING ANALYSIS

A Health Risk Assessment (HRA) is required when the emissions of toxic air contaminants (TACs) are at or exceed the trigger levels outlined in Regulation 2, Rule 5, Table 2-5-1. The emissions of TACs are less than the trigger levels; therefore, an HRA is not required.

Table 3. Toxic Air Contaminants Emissions from S-1

TAC	Max Annual Throughput (gal/yr)	Density (lb/gal)	Max % Weight	Annual Emissions (lb/yr)	Chronic Trigger Level (lb/yr)	Trigger?	Average Hourly Emissions (lb/hr)	Acute Trigger Level (lb/hr)	Trigger?
Isopropyl Alcohol	100	10.6	3	31.8	2.70E+05	No	0.013	7.10E+00	No

V. BEST AVAILABLE CONTROL TECHNOLOGY

In accordance with Regulation 2-2-301, BACT is triggered for any new or modified source with the potential to emit 10 pounds or more per highest day of POC, NPOC, NOx, CO, SO₂, or PM₁₀.

At an average daily rate of 2.8 lbs of POC per day, BACT is not triggered.

VI. OFFSETS

Since the facility permitted levels are below the offset triggers levels specified in Regulation 2-2-302, offsets are not required.

VII. STATEMENT OF COMPLIANCE

District Rules

Vapor Degreasing Operation (S-1) is subject to and expected to comply with the storage and disposal requirements of Regulation 8-1-320 (Surface Preparation; Clean-up; Coating, Ink, Paint Removal), 321 (Closed Containers), and 322 (Spray Equipment Clean-up Limitation) and the recordkeeping requirements of Regulation 8-16-501 (Solvent Records).

S-1 is subject to and expected to comply with the solvent cleaner requirements of Regulation 8-16.301.4.1: Freeboard ratio greater than or equal to 0.75. The freeboard ratio of the proposed vapor degreaser (S-1) is 1.8, which meets the requirement in Regulation 8-16-301.4.

California Environmental Quality Act (CEQA)

This project is ministerial under the District Regulation 2-1-311 (Permit Handbook Chapter 6.2), and is therefore not subject to CEQA review.

New Source Performance Standards (NSPS)

NSPS is not triggered.

National Emissions Standards for Hazardous Air Pollutants (NESHAP)

This project does not use any halogenated solvents listed in Regulation 8-16-216 (Halogenated Solvent Cleaners); therefore, NESHAP is not triggered.

Prevention of Significant Deterioration (PSD)

Pursuant to Regulation 2-2-304 (PSD Requirement), this project is not subject to PSD review because the facility is not a major facility emitting more than 100 tons of any criteria air pollutant per year.

School Notification (Regulation 2-1-412)

Because this equipment will be located within 1,000 feet of a K-12 school, the project is subject to the public notification requirements of Regulation 2-1-412 due to the increase in emissions from the project.

VIII. PERMIT CONDITIONS

Permit Condition #26900 for S-1

1. The owner/operator of S-1 shall not exceed the following usage limits during any consecutive twelve month period:

TechSpray Precision-V ME1500: 100 gallons

(Basis: Cumulative Emissions)

2. The owner/operator may use an alternate solvent(s) other than the materials specified in Part 1 and/or usages in excess of those specified in Part 1, provided that the owner/operator can demonstrate that all of the following are satisfied:

- a. Total POC emissions from S-1 do not exceed 730 lbs in any consecutive twelve-month period;
- b. The use of these materials does not increase toxic emissions above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.

(Basis: Cumulative Emissions)

3. To determine compliance with the above parts, the owner/operator shall maintain the following records and provide all of the data necessary to evaluate compliance with the above parts, including the following information:

- a. Quantities of each type of solvent used at this source on a monthly basis;
- b. If a material other than those specified in Part 1 is used, POC and toxic component contents of each material used; and mass emission calculations to demonstrate compliance with Part 2, on a monthly basis;
- c. Monthly usage and/or emission calculations shall be totaled for each consecutive twelve month period.

All records shall be retained on-site for two years, from the date of entry, and made available for inspection by District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District Regulations.

(Basis: Cumulative Emissions)

End of Conditions

IX. RECOMMENDATION

The District has reviewed the material contained in the permit application for the proposed project and has made a preliminary determination that the project is expected to comply with all applicable requirements of District, state, and federal air quality-related regulations. The preliminary recommendation is to issue an Authority to Construct for the equipment listed below. However, the proposed source will be located within 1,000 feet of a school, which triggers the public notification requirements of District Regulation 2-1-412. After the comments are received and reviewed, the District will make a final determination on the permit.

I recommend that the District initiate a public notice and consider any comments received prior to taking any final action on issuance of an Authority to Construct for the following:

S-1 Vapor Degreaser; Make: Baron Blakeslee, Model: MLR-120LE-SPL

By: _____
Danny Nip, Air Quality Engineer I

Date: _____